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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,030	06/13/2006	Tetsuo Saito	285720US3PCT	1146
22850	7590	01/13/2009	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			ENGLISH, JAMES A	
			ART UNIT	PAPER NUMBER
			3616	
			NOTIFICATION DATE	DELIVERY MODE
			01/13/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/567,030	Applicant(s) SAITO ET AL.	
	Examiner James English	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/03/2006, 11/03/2006, and 01/07/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the abstract exceeds the 150 word limit. Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claims 1 and 3 are objected to because of the following informalities: In claim 1, lines 21-22, the phrase "and that (16)" appears to be incomplete. In claim 3, page 40, line 12, the phrase "and that (16)" appears to be incomplete. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suehiro et al. (US Patent No. 6,890,002 B1) in view of Yamaji et al. (JP 11-278189), machine translation of description.

With respect to claims 1 and 3, Suehiro et al. discloses a gas generator (G1), provided for an airbag module, which is provided with a metal housing (4) constituted by an initiator shell (1b) and a closure shell (1), a combustion chamber (Fig. 1) which is formed inside the housing (4) and into which gas generants (6) generating a high-temperature gas through combustion are loaded, a filter member (7) disposed around the combustion chamber (Fig. 1), an igniter (30) mounted into the housing (4) and igniting and burning the gas generants (6) inside the combustion chamber (Fig. 1, col. 3, lines 26-30 and col. 4, lines 8-10, 13-17, 23-26.) Suehiro et al. further discloses a plurality of gas discharge openings (8) formed in the housing (4) and discharging the gas generated in the combustion chamber (Fig. 1), the fitting structure of the gas generator (G1), in which either or both of the initiator shell (1b) and the closure shell (1) constituting the housing (4) are provided with semi-spherical or semi-oval end plate portions (2a, 3f) and cylindrical portions (1a, 1b) having diameter D formed continuously from these end plate portions (2a, 3f), the gas generator whose H / D (L / D) of a ratio of the bottom distance H (L) between the end plate portion (3f) of the initiator shell (1b) and the end plate portion (2a) of the closure shell (1) to the diameter D of the cylindrical portions (1a, 1b) is in the range of 0.4-1.3. (Fig. 1, col. 4, lines 43-47 and col. 5, lines

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21-24, 39-41.) Suehiro et al. further discloses a plurality of gas discharge openings (8) symmetrically formed in the housing (4) so as to discharge the gas in two directions. (Fig. 1, col. 43-45.) Suehiro et al. does not disclose a retainer. Yamaji et al. teaches of a gas generator (14) fitted to a retainer (18) of an airbag module (16) for a front passenger seat of an automobile and housing (4) is fitted so that the gas discharge openings (8) are opened in the longitudinal direction of the retainer. (Figs. 1-3, machine translation of description("MTD") paragraph 44, lines 1-4.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a retainer to the invention of Suehiro et al. as described in Yamaji et al. to adapt the gas generator to be fit into an airbag module.

With respect to claim 2, Suehiro et al. does not disclose a radiation angle from the housing within 120 degrees. Yamaji et al. teaches of a radiation angle (α) from the housing (12) is within 120 degrees where gas discharged in the longitudinal direction (F-F) of the retainer is discharged radially at the center of the central line of the cylindrical portions of the housing. (Figs. 1-4, MTD paragraph 47, lines 1-8.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Suehiro et al. to have a radiation angle within 120 degrees as described in Yamaji et al. to prevent gas discharged from the inflator to come into direct contact with the side wall of the leading end in the width direction of the retainer to prevent deformation.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references Ruckdeschel et al. (US Patent 6,056,319), Suehiro et al. (WO 03/066390 A1) and Yokote (JP 9-226509) disclose similar gas generators as claimed in the invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James English whose telephone number is (571)270-7014. The examiner can normally be reached on Monday - Thursday, 7:00 - 5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Q. Nguyen can be reached on (571)272-6952. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Q. Nguyen/

/James English/

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Supervisory Patent Examiner, Art Unit 3616

Examiner, Art Unit 3616